

# University of Southern California

Keck School of Medicine



## Department of Neurological Surgery

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November 27, 2006

Kevin J. Martin  
Chairman  
Federal Communications Commission  
445 12th Street, SW  
Washington, D.C. 20554

Re: Reply Comments  
ET Docket No. 06-135 & RM-11271

Dear Chairman Martin:

I am pleased to support the Alfred Mann Foundation's ("AMF") request that the Commission adopt service rules and allocate up to 20 MHz of spectrum to accommodate new wireless wideband microstimulator devices on a secondary basis. As a neurosurgeon at the University of Southern California, I perform "functional" neurosurgery procedures such as deep brain stimulation for Parkinson's disease and other movement disorders. The field of neural interface technologies is developing rapidly and, I believe, will provide a truly miraculous benefit for many patients suffering from a variety of previously untreatable neurological injuries and diseases.

The establishment of a service allocation is vital to the development of a new generation of wireless wideband medical devices designed to restore sensation and function to paralyzed limbs and organs. These devices offer a safer, less invasive, and more effective treatment option than is available with existing equipment.

The Commission's rules currently do not provide any spectrum to permit operation of new wireless wideband microstimulator devices. Although the Commission has allocated some spectrum for medical telemetry operations and for medical implant communications services, this spectrum is not suitable for wideband medical implant devices that require larger bandwidths to perform more complex functions. Without adequate spectrum and service rules to support the operation of these innovative devices, millions of Americans will be deprived of a safe and effective medical treatment for their debilitating health conditions.

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The Commission's notice of injury issued in the above-referenced proceeding is an important first step toward adopting the necessary rules to encourage development of the next generation of wireless wideband microstimulator devices. I urge the Commission to continue its efforts in this area by expeditiously granting AMF's request for commencement of a separate rulemaking.

Sincerely,

Mark A. Liker, M.D.  
Assistant Professor

cc: Marlene H. Dortch  
FCC Secretary